

**Figure 8**  
Typical Bank Stabilization Cross Section  
Wildcat & Kokomo Creeks (OU3)  
Continental Steel Superfund Site  
Kokomo, Indiana



**Appendix A**  
**Ecological and Hydrological Investigation**



Due to its size and because it has not changed since the February 2004 version of the Wildcat and Kokomo Creeks Basis of Design, Appendix A is not being reissued with this document.



**Appendix B**  
**Creek Sediment Evaluation Documentation**





Due to its size and because it has not changed since the February 2004 version of the Wildcat and Kokomo Creeks Basis of Design, Appendix B is not being reissued with this document.



**Appendix C**  
**Dredge Information**

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# 'AMPHIBIOUS' DREDGE



## GENERAL PRELIMINARY SPECIFICATIONS

### Pontoon Construction

High Strength, Low Alloy, Weathering Cor-Ten plate steel is used in the fabrication of the Wilco pontoons. Cor-Ten steel has 5 to 8 times the atmospheric corrosion resistance and 20% more tensile strength than similar size A36 structural plate steel. Each pontoon has 5 bulkheads, providing 6 independent watertight compartments. The bottoms of the pontoons are reinforced for rough terrain operation.

### Drive System

Power for the pontoon tracks is provided by the dredge's diesel engine and main hydraulic pumps. Hydraulic travel motor/brake combinations are mated to sealed planetary final drives to provide independent power to each pontoon track. The tracks are controlled electronically from the lever room of the dredge. Heavy duty 5-inch pitch marsh buggie track chain is used.

### Track Cleats

Specially designed marine grade, extruded 6061-T6 aluminum alloy cleats with 2 HDMP wear pads are capable of supporting the pontoon and its payload.

### Speed

Up to 2.5 mph on hard dry surface and up to 1.0 mph in water

### Dredge Dimensions

Total Width	20' 6"
Total Length (Ladder Extended, Raised)	67'
Total Length (Ladder Retracted, Raised)	56'
Total Weight	95,000 lbs

### Dredge Pump

Suction Diameter	8"
Discharge Diameter	8"

### Dredge Digging Depths

Max digging angle (fwd./reverse)	60°
Minimum digging depth	3'
Maximum digging depth	15'

### Dredge Cut Widths (@ max digging depths)

Swing Angle (off center)	25°
Max. Cut Width (Forwards)	24'
Max. Cut Width (Backwards)	9'

### Prime Mover

All functions are powered by a Caterpillar 3126B industrial diesel engine, radiator cooled with residential grade silencer rated 275 bhp @ 2400 rpm. This engine is EPA & CARB Tier II compliant. The engine features Caterpillar premium gages, alarms, and shutdown systems.

### Dredge Pump

The dredge pump features an 8" ID suction and an 8" ID discharge with a 19 1/2" impeller size. The maximum particle clearance is 3 1/2". The nominal pump capacity (water) 2000 gpm @ 185 TDH. The dredge pump drive utilizes a close coupled closed-loop hydrostatic transmission.

### Cutter Drive

The sealed planetary drive features an alloy cutter shaft and anti-friction bearings. The 24" inside diameter 5-blade basket cutter is equipped with replaceable cast serrated edges as a standard feature.

Nominal drive torque	34,450 in-lb
Cutter force	2,296 lb
Cutter force (per linear inch)	153 lb/in
Cutter speed	0-32
Nominal drive power	17.5 HP

### Spuds

Three (3) tubular steel power up/power down construction

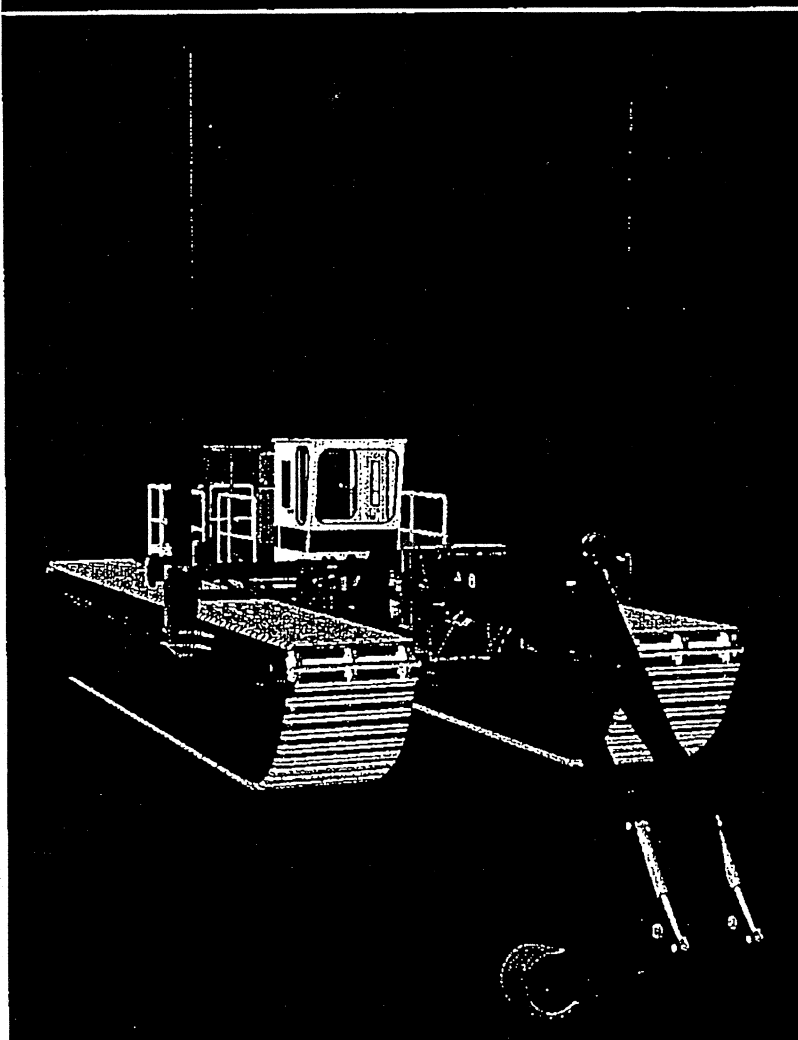
Diameter	8"
Length	24'
Weight each (estimated)	800 lb

**Dredging  
Supply**  
Company, Inc.

☎ (985) 479-1355  
[www.dscredge.com](http://www.dscredge.com)

# 'AMPHIBIOUS' DREDGE

A joint effort utilizing the leading manufacturers of *amphibious equipment* and *dredges* has evolved into a new product release the "*Amphibious*" Dredge!



This new concept product utilizes the knowledge of Wilco's amphibious undercarriages and DSC's dredge designs. As both companies are noted as the leaders in their industry, this seemed to be a perfect match to offer a new product that could be engineered, designed and manufactured by reliable and recognized companies. The prototype for this new Amphibious dredge features an 8" x 8" dredge pump configuration and has many of the DSC Moray dredge characteristics.

**Dredging  
Supply**  
Company, Inc.

**WILCO**  
MANUFACTURING, L.L.C.  
*Amphibious Hydraulic Undercarriages*

**Appendix D**  
**M-CACES Cost Estimate**

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Thu 19 Jan 2006  
Eff. Date 10/24/05

U.S. Army Corps of Engineers  
PROJECT CSSS27: Wildcat&Kokomo Ck Sediment Remy - Continental Steel Superfund  
Wildcat & Kokomo Creek Sediment Removal

TIME 08:59:18  
TITLE PAGE 1

Wildcat&Kokomo Ck Sediment Remy  
Continental Steel Superfund  
Site (CSSS)  
Kokomo, Indiana  
Final Design Dated January 2006

Designed By: CH2M HILL  
Estimated By: CH2M HILL

Prepared By: CH2M HILL

Preparation Date: 10/24/05  
Effective Date of Pricing: 10/24/05

Sales Tax: 0.00%

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No Backup Reports...

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U 19 Jan 2006  
F. Date 10/24/05  
TAILED ESTIMATE

U.S. Army Corps of Engineers  
PROJECT CSS927: Wildcat/Kokomo Crk Sediment Remy - Continental Steel Superfund  
Wildcat & Kokomo Creek Sediment Removal  
01. Preconstruction Submittals

TIME 08:59:18  
DETAIL PAGE 1

	QUANTITY	UOM	UNIT COST	TOTAL COST
Preconstruction Submittals				
Safety Supply Allowance	1.00	LS	5000.00	5,000
Submittals	1.00	LS	7500.00	7,500
Home Office Engineering Support	1.00	LS	7500.00	7,500
Field Mgmt-Wildcat & Kokomo Crks				
Project Manager	9.00	MO	9580.00	86,220
Superintendent	9.00	MO	7750.00	69,750
Field Engineer	9.00	MO	6600.00	59,400
Survey Team	9.00	MO	5000.00	45,000
H&O	9.00	MO	9200.00	82,800
Field Office/Utils/Porta-Johns	9.00	MO	2975.00	26,775
Fuel Storage	9.00	MO	250.00	2,250
Fire Protection	1.00	LS	5000.00	5,000
Spill Prevent/Emergency Response	1.00	LS	4000.00	4,000
Site Vehicles	9.00	MO	5600.00	50,400
Mechanic with Truck	9.00	MO	6700.00	60,300
Mob Equip/Parking/Staging Areas				
Mobilize Equipment	1.00	LS	75000.00	75,000
Construct Employee Parking Area	1.00	LS	5000.00	5,000
Maintain Haul Road/Access Road	9.00	MO	1900.00	17,100
Traffic Ctrl-Trucks At Markland	9.00	MO	6200.00	55,800
Traffic Control Signage	1.00	LS	5000.00	5,000
Orange Safety Fencing	1000.00	LF	3.50	3,500
Equipment Storage Trailers/Rent	9.00	MO	460.00	4,140
Near Bank Soil Excavation				
Excavate Creek Bank Soil	10000	CY	5.60	56,000
SedimentExcavationStabilization				
Hydraulic Dredging	6479.00	CY	35.00	226,765
Mechanical Dredging	3001.00	CY	90.00	270,090
Access Road	3000.00	LF	43.00	129,000
Booms	1.00	LS	45025.00	45,025
Dewatering	4601.00	CY	25.00	115,025
Adnl Charge for Limited Access	1.00	LS	258000.00	258,000
Equipment Decontamination	1.00	LS	20000.00	20,000
Water Treatment System				
Mobilization/Demobilization	1.00	EA	9700.00	9,700
Power	9.00	MO	1500.00	13,500
Water Treatment System Rental	9.00	MO	35000.00	315,000
Water Trtmt System Consumables	1.00	LS	96000.00	96,000
Habitat Restoration				
Restoration/Revegetation	86000	SY	4.30	369,800
Woven Coir Fiber Mat	56250	SY	5.00	281,250
W-weir	6.00	EA	12000.00	72,000
U-cross vane (large)	5.00	EA	12500.00	62,500
U-cross vane (small)	10.00	EA	6000.00	60,000
U-cross vane	14.00	EA	9000.00	126,000
ConfirmedSedimentSampling&Analysis				
Labor	2000.00	HR	60.00	120,000

	QUANTITY UOM	UNIT COST	TOTAL COST
Disposal			
TSCA	2350.00 TON	130.00	305,500
Non-TSCA	10000 TON	37.00	370,000
Creek Bank Soil	15000 TON	37.00	555,000
Demobilize			
Project Closeout	1.00 LS	23000.00	23,000
Demobilize Equipment	1.00 LS	50000.00	50,000
Subcontractor G&A (11%)	1.00 LS	508925.00	508,925
Subcontractor Fee (8%)	1.00 LS	370127.00	370,127
Payment/Performance Bonds (3.5%)	1.00 LS	192697.00	192,697
Engineering Project Mgmt (10%)	1.00 LS	550564.00	550,564
Contingency (15%)	1.00 LS	825846.00	825,846
TOTAL Wildcat&Kokomo Crk Sediment Remy	1.00 EA	7074749.00	7,074,749

Demobilize  
Subcontractor Costs  
Payment/Performance Bonds  
Project Management Costs

Thu 19 Jan 2006  
Eff. Date 10/24/05

U.S. Army Corps of Engineers  
PROJECT CSS827,  
Wildcat&Kokomo Crk Sediment Remy - Continental Steel Superfund  
Wildcat & Kokomo Creek Sediment Removal  
\*\* PROJECT DIRECT SUMMARY - Task \*\*

TIME 08:58:16  
SUMMARY PAGE 1

	QUANTITY	UOM	UNIT COST	TOTAL COST
01 Preconstruction Submittals	1.00	EA	20000.00	20,000
02 Field Mgmt-Wildcat & Kokomo Crks	1.00	EA	491895.00	491,895
03 Mob Equip/Parking/Staging Areas	1.00	EA	165540.00	165,540
04 Near Bank Soil Excavation	1.00	EA	56000.00	56,000
05 SedimentExcavationsStabilization	1.00	EA	1063905.00	1,063,905
06 Water Treatment System	1.00	EA	434200.00	434,200
07 Habitat Restoration	1.00	EA	971550.00	971,550
08 Confirmsedimentsampling&analysis	1.00	EA	120000.00	120,000
09 Disposal	1.00	EA	1230500.00	1,230,500
10 Demobilize	1.00	EA	73000.00	73,000
11 Subcontractor Costs	1.00	EA	879052.00	879,052
12 Payment/Performance Bonds	1.00	EA	192697.00	192,697
13 Project Management Costs	1.00	EA	1376410.00	1,376,410
TOTAL Wildcat&Kokomo Crk Sediment Remy	1.00	EA	7074749.00	7,074,749

